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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,181	02/26/2002	Koichiro Kawaguchi	01272.020511	2428

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EXAMINER

HUFFMAN, JULIAN D

ART UNIT PAPER NUMBER

2853

DATE MAILED: 03/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/082,181

Applicant(s)

KAWAGUCHI ET AL. 

Examiner

Julian D. Huffman

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 4-8,12,17-21 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 9-11,13 and 22-24 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 4-8, 12, 17-21 and 25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the election of species requirement in Paper No. 7.

Applicant's election with traverse of the election of species requirement in Paper No. 7 is acknowledged. The traversal is on the ground(s) that the species are closely related, would not require separate fields of search and that the trouble and expense of filing multiple applications is undesirable and that the public at large should not be required to obtain and study separate patent documents in order to have available all of the issued patent claims covering the invention.

This is not found persuasive since if the restriction were not imposed, the application would not be in accordance with 37 CFR 1.141(a) which states that two or more independent and distinct inventions may not be claimed in one national application, except that more than one species of an invention, not to exceed a reasonable number, may be specifically claimed in different claims in one national application, provided the application also includes an allowable claim generic to all the claimed species and all the claims to species in excess of one are written in dependent form (§ 1.75) or otherwise include all the limitations of the generic claim.

Claim Objections

2. Claims 2, 3 and 16 are objected to because of the following informalities:

It is respectfully suggested that the word "comprising" be changed to "comprises"

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 15 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Askren et al. (U.S. 6,467,900 B1).

Askren et al. disclose a printing apparatus having printing means that executes printing on a print medium transported along a transportation path, the apparatus comprising:

upstream transporting means including a pair of opposite rollers (fig. 1, elements 29 and 39) arranged upstream of said printing means in said transportation path for transporting the print medium by rotating while sandwiching the print medium;

downstream transporting means arranged downstream of said printing means in said transportation path for transporting the print medium (elements 37 and 35); and

storage means for storing nip position information representative of a position of a nip portion between said pair of rollers within said transportation path, the nip portion sandwiching an end of the print medium between said rollers (fig. 4, element 51, column 2, lines 45-55 and column 3, lines 1-11); and

wherein said upstream transporting means comprises a transportation roller (29) located upstream of said printing means in said transportation path and driven by predetermined driving means and a pinch roller (31) that rotates so as to follow rotation of the transportation roller.

Askren et al. also disclose a printing method for executing printing on a print medium transported along a transportation path by using printing means, said printing method comprising the steps of:

transporting the print medium by upstream transporting means including a pair of opposite rollers arranged upstream of said printing means in said transportation path while sandwiching the print medium (fig. 1, elements 29 and 39);

transporting the print medium by downstream transporting means arranged downstream of said printing means in said transportation path (elements 37 and 35); and

storing nip position information representative of the position of a nip portion between said pair of rollers within said transportation path, the nip portion sandwiching an end of the print medium between said rollers (fig. 4, element 51, column 2, lines 45-55 and column 3, lines 1-11).

Claim R ejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Askren et al. in view of Endo et al. (U.S. 4,723,129)

Askren et al. disclose everything claimed with the exception of the use of thermal energy for ejecting ink droplets.

However, Endo et al. disclose discharging ink using thermal energy (abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the thermal printhead of Endo et al. into the invention of Katayama et al. as modified. The reason for performing the modification would have been to provide a simple structure which allows high speed recording and a clear image (column 3, lines 27-32).

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Broder et al. (U.S. 5,368,403) in view of Askren et al.

Broder et al. disclose a printing apparatus having printing means that executes printing on a print medium transported along a transportation path, the apparatus comprising:

upstream transporting means including a pair of opposite rollers (fig. 3, elements 122 and 124) arranged upstream of said printing means in said transportation path for transporting the print medium by rotating while sandwiching the print medium;

downstream transporting means arranged downstream of said printing means in said transportation path for transporting the print medium (elements 120 and 100); and

wherein said downstream transporting means comprises a sheet discharging roller (120) located downstream of said printing means in said transportation path and driven by predetermined driving means and a spur that is urged toward the sheet discharging roller (100, urged by 80).

Broder et al. does not disclose nip position storage means.

However, Askren et al. disclose storage means for storing nip position information representative of a position of a nip portion between said pair of rollers within said transportation path, the nip portion sandwiching an end of the print medium between said rollers (fig. 4, element 51, column 2, lines 45-55 and column 3, lines 1-11).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Broder et al. by adding the nip position detector and electronic controller. The reason for performing the modification would have been to provide a means to inexpensively and reliably detect the presence of print media thereby eliminating certain printer failure modes (column 1, lines 38-41).

Allowabl Subject Matter

8. Claims 9-11, 13 and 22-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record does not disclose a means for or step of measuring the interval between a predetermined reference position located upstream of said nip portion in the transportation path and said nip portion, on the basis of a result of detection by the rotation state detecting means.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. 4,203,586 to Hoyer which discloses an encoder for detecting the state of feeding of a sheet through a nip roller.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian D. Huffman whose telephone number is (703) 308-6556. The examiner can normally be reached on Monday through Friday from 9:30 a.m. to 6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow, can be reached at (703) 308-3126. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722. Faxes requiring the immediate attention of the examiner may be sent directly to the

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examiner at (703) 746-4386. Note that this number will not automatically send a confirmation that the fax was received.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



JH

12 March 2003



JUDY NGUYEN
PRIMARY EXAMINER